



WHERE BUSINESS AND THE ENVIRONMENT CONVERGE



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September 2, 2012
ECS Project # 03-216630.00

Ms. Kimberly Tisa, PCB Coordinator – (OSRR07-2)
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts, 02109-3912

Re: Clarification of Modification Items - Risk Based Site Cleanup and Disposal Plan
Thomas Prince School
170 Sterling Road
Princeton, MA 01541

Dear Ms. Tisa:

On behalf of the Town of Princeton, enclosed please find a summary and clarification of the Modification items to the Risk Based Site Cleanup and Disposal Plan of February 2012. The initial modifications to that plan were submitted to EPA in a report dated August 14, 2012. The clarifications presented herein are based on discussions during our meeting on Wednesday, August 29, 2012. The proposed abatement applies to the interior/exterior areas of the 100-Wing classrooms 100, 102, 104, 106, 108 and 110 and to the exterior of the 200-Wing classrooms 201, 203, 205, 207 and 211. The work will be performed per methodologies provided in the contractor work plan. Note that a major difference between the 200-Wing classrooms and the 100-Wing Classrooms is that there is only one window unit per classroom in the 100-Wing rooms as compared to two window units per classroom in the 200-Wing rooms.

To simplify the requested approval for this modification, the width of the proposed double layer epoxy coating associated with this modification will be the same as that previously approved and completed for the 200-Wing classrooms, (even though the extent of PCB impact to the adjacent masonry materials was not as extensive in the 100-Wing rooms as the 200-Wing rooms). I trust that this summary and clarification of proposed modifications is in conformance with that discussed during our meeting.

In summary, the following activities are proposed. Clarifications and additions are provided in an attempt to better define the task and to clear any confusion.

- 1) **Complete removal of PCB-containing interior/exterior window caulking associated with classrooms 100, 102, 104, 108 and 110** (window caulking in Room 106 was previously removed as part of the pilot test). This will also include the **removal of each window frame** unit which makes up the window, i.e. metal window frame and glass. Prior to reinstallation of the window frame unit, all visible caulking will be removed from the areas previously in contact with the window caulking and

the **window frames will be cleaned via HEPA vacuum and wet wipe methods. One wipe sample per window frame unit** from areas previously in contact with caulking material will be collected and submitted for extraction by EPA Method 3540C and analysis of PCB's via USEPA Method 8082. There are approximately 20 linear feet of window caulking per window frame unit, thus representing a total of approximately **100 linear feet of window caulking to be removed.**

If an analytical result for the wipe sampling of a window frame exceeds 1 ug/100 cm², the window frame will be re-cleaned and re-sampled and not re-installed until an analytical result of < 1 ug/100 cm² is achieved. **In addition, one wipe sample will be collected from the window frame in classroom 106** (previously addressed as part of the pilot test) to verify that PCB greater than 1 ug/100 cm² is not present on the window frame.

- 2) **Complete removal of vertical structural joint caulking (and underlying backing material) associated with the exterior pre-cast concrete columns for classrooms 100, 102, 108, 110, 201, 203, 205, 207 & 211** (exterior vertical joint caulking associated with classrooms 104, 106, and 209 has been previously removed). There are approximately 11 linear feet of caulking per concrete column and there are 21 joints in total representing **231 feet of exterior vertical joint caulking to be removed.** Remnants of "bond breaker backing" that may be present beneath the caulking in these joints (and potentially remaining within the joints associated with classrooms 104/106 and 209 for which caulking was previously removed) will also be removed;
- 3) **Complete removal of caulking associated with the exterior air vent intakes for classrooms, 100, 102, 104, 108 and 110** (caulking around the exterior air vent intake for Room 106 and for all of the 200-wing classrooms has been previously removed). There are approximately 11 linear feet of caulking per exterior vent and there are 5 vents in total to be addressed, representing a **total of 55 linear feet of exterior air vent caulking to be removed.** In addition, the openings and readily accessible areas of the vent intakes will be cleaned via HEPA vacuum and wet wipe methods;
- 4) Isolation by **double layer epoxy coating** of PCB-contaminated **interior adjacent masonry porous materials following interior window caulking removal associated with the 100-wing classrooms (100, 102, 104, 108 and 110).**

Epoxy coating of the interior masonry materials will include the entire inner face of the concrete block window frame that was in contact with or adjacent to the metal window frame and window caulking, and the concrete block walls located to either side of the window frame and above and below the window as applicable, at a distance of **six inches** from the corner of the inner concrete block facing the window. Though epoxy coating was previously applied to interior surfaces of classroom 106, the epoxy was not applied to the width as specified herein and thus will be re-applied to these current specifications, i.e. six inch width;

- 5) Isolation by **double layer epoxy coating** of PCB-contaminated adjacent **exterior masonry porous materials following removal of caulking from the exterior**

vertical structural caulked joints at the 100-wing classrooms (rooms 100, 102, 104, and 110). One difference in this proposed epoxy application compared with the epoxy application at the exterior of the 200-Wing classrooms will be that the exterior pebbled concrete surfaces will not be epoxy coated due to the lack of PCB present above 1 ppm.

Epoxy coating of the exterior masonry materials associated with the exterior vertical structural joint caulking will include the **entire surfaces of the exterior precast concrete columns and the entire surfaces of concrete present between the windows**, with two coats of the epoxy coating. The adjacent **exterior brick**, which abuts each of the outermost precast concrete columns, is proposed to be coated with two layers of epoxy (to a distance of **six inches** from the removed caulking). Though epoxy coating was previously applied to the exterior surfaces associated with classroom 106/108, the epoxy was not applied to the widths as specified herein and thus will be re-applied to this area under the current specifications, i.e. entire surfaces of the exterior concrete columns and the adjacent brick to a six inch width. Following epoxy coating, new “bond breaker backing” and caulking will be installed within the joints per the manufactures’ specifications;

- 6) Isolation by **double layer epoxy coating** of PCB-contaminated **adjacent masonry porous materials following removal of caulking from the exterior vertical structural caulked joints at the 200-wing classrooms** (rooms 201, 203, 205, 207 and 211). Epoxy coating was previously applied over the vertical structural caulked joints and adjacent masonry porous surfaces (exterior precast concrete columns and/or brick wall face abutting each of the outermost precast concrete columns) associated with these areas.

As part of this modification, the caulking present within these joints (and the underlying backing material) is proposed to be completely removed. This will involve cutting through the previously applied epoxy in the immediate area of the structural vertical caulked joints and removing the underlying caulking and any backing material that may be present. Thus the porous surfaces previously in contact with caulking, and those other areas adjacent to the caulked joint that were previously coated with epoxy that may be compromised during the removal of the vertical structural joint caulking, will also be coated with 2 layers of epoxy. Following epoxy coating, new “bond breaker backing” and caulking will be installed within the joints per the manufactures’ specifications;

- 7) Isolation by **double layer epoxy coating** of PCB-contaminated adjacent **exterior masonry porous brick materials following removal of caulking from the exterior air vent intakes for classrooms, 100, 102, 104, 108 and 110**. Caulking around the exterior air vent intake for Room 104 and for all of the 200-Wing classrooms has been previously removed.

Epoxy coating of the **exterior masonry brick materials** associated with the **exterior air vent intakes** will include the application of two layers of epoxy coating over the brick surfaces within **eight inches** of the caulked joint. Though epoxy coating was previously applied to the exterior brick surfaces associated with classroom 106, the

epoxy was not applied to the width as specified herein and thus will be re-applied to this area under the current specifications, i.e. eight inch width. New "bond breaker backing" and caulking will be installed within the joints per the manufactures' specifications;

- 8) Inspection of the **capacitors** on the motors associated with the fans for the unit ventilators in classrooms 100, 102, 104, 106, 108, & 110 will be performed to determine if they contain PCB. If found to contain PCB or if it cannot be determined, the capacitors will be changed out with new, non-PCB containing capacitors. The interior surfaces of the unit ventilators were previously cleaned via HEPA vacuum and wet wipe methods. However, upon inspection of and/or removal of the capacitors, the interior surfaces of the unit ventilators will be re-cleaned (HEPA vacuum and wet wipe) as required to remove visible dust/dirt/grime that may have accumulated since the last cleaning.

Thank you for your prompt attention to this matter. If any of the items that we previously discussed have been mistakenly omitted from the responses provided above, or the explanations and clarifications are unclear or are otherwise insufficient for you to render an approval for the proposed work, please notify me immediately to discuss.

Sincerely,

ENVIRONMENTAL COMPLIANCE SERVICES, INC.



Charles Klingler
Worcester Branch Manager

cc: Town of Princeton, John Lebeaux, Town Administrator
Wachusett Regional School District, Thomas Pandiscio, Superintendent